REMARKS

In response to the Office Communication mailed February 2, 2010, Applicants submit the foregoing claims and the following remarks. As provided in the Reply of July 14, 2009, claims 1-17 have been canceled, without prejudice, and with the reservation that the same subject matter may be submitted in one or more copending applications claiming priority from this or one or more related applications. Claim 18 was previously amended in the Reply of July 14, 2009, to stand in independent form, including all the limitations of claim 1. Claims 21-41 were previously presented in the Reply of July 14, 2009, and introduce no new matter. Claims previously numbered as 38, 36-41 have been amended herein to correct errors in claim numbering and dependency, and introduce no new matter.

In view of the following remarks, Applicants respectfully request favorable consideration of claims 18-40 presented herein.

Official Communication Summary

In the Official Communication dated February 2, 2010, the Examiner alleges that the reply filed on 7-14-2009 is not fully responsive to the prior Office Action because of the following alleged omission(s) or matter(s):

(i) Applicant has not particularly point out how the new claims define over the art applied and cited in the last office action;

(ii) It is allegedly unclear as to what structure in the specification corresponds to the means plus function language in the claims.

Applicants respectfully traverse these alleged deficiencies in view of the following remarks.

Previously Submitted Claims 21-41

Previously submitted claims 21-41 (as presently amended claims 21-40) are directed to various embodiments of an apparatus for the delivery of a therapeutic agent to cells in a predetermined cited within a tissue. Applicants provide the following remarks with regard to how claims 21-41 (claims 21-40 as presently amended) define over the art applied and cited in the Office Action of June 28, 2007.

Applicants respectfully point out that when determining whether a claim is obvious, the Examiner must make "a searching comparison of the claimed invention – including all its limitations

– with the teaching of the prior art." In re Ochiai, 71 F.3d 1565, 1572 (Fed. Cir. 1995). Thus, "obviousness requires a suggestion of all limitations in a claim." CFMT, Inc. v. Yieldup Intern. Corp., 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing In re Royka, 490 F.2d 981, 985 (CCPA 1974)).

Cited References Hofmann '525 and Enggaard

Claims 21 and 34-37 are directed to an apparatus for the delivery of a therapeutic agent to cells which comprises, *inter alia*, a plurality of penetrating electrodes arranged with a predetermined spatial relationship relative to the orifice of said apparatus. Applicants assert that cited reference Hofmann '525 (US 5,273,525) is silent with regard to disclosing or suggesting at least the claimed element of a plurality of penetrating electrodes arranged with a predetermined spatial relationship relative to the orifice of said apparatus as recited in claims 21 and 34-37. Further, Applicants assert that cited reference Enggaard does not cure the deficiencies of Hofmann '525.

Thus, Applicants assert that Hofmann '525 in view of Enggaard do not, either alone or in combination, disclose or suggest all of the elements of the claimed apparatus for the delivery of a therapeutic agent recited in claims 21 and 34-37.

Claims 22 and 26-31 directed to an apparatus for the delivery of a therapeutic agent to cells which comprises, *inter alia*, a plurality of penetrating electrodes operatively connected to a controlled source of energy sufficient to deploy the electrodes to a predetermined depth within the patient. Applicants assert that cited reference Hofmann '525 (US 5,273,525) is silent with regard to disclosing or suggesting at least the claimed element of a plurality of penetrating electrodes operatively connected to a controlled source of energy sufficient to deploy the electrodes to a predetermined depth within the patient as presently claimed in claims 22 and 26-31. Further, Applicants assert that cited reference Enggaard does not cure the deficiencies of Hofmann '525.

Thus, Applicants assert that Hofmann '525 in view of Enggaard do not, either alone or in combination, disclose or suggest all of the elements of the claimed apparatus for the delivery of a therapeutic agent recited in claims 22 and 36-31.

Claim 23, and claims 24 and 25 which depend therefrom, is directed to an apparatus for the delivery of a therapeutic agent to cells which comprises, *inter alia*, a protective shield which is configured to extend over said the electrodes following removal of the electrodes from a predetermined site within the tissue. Applicants assert that cited reference Hofmann '525 (US

5,273,525) is silent with regard to disclosing or suggesting at least the claimed element of a protective shield which is configured to extend over said the electrodes following removal of the electrodes from a predetermined site within the tissue as presently claimed in claims 23-25. Further, Applicants assert that cited reference Enggaard does not cure the deficiencies of Hofmann '525.

Thus, Applicants assert that Hofmann '525 in view of Enggaard do not, either alone or in combination, disclose or suggest all of the elements of the claimed apparatus for the delivery of a therapeutic agent recited in claims 23-25.

Claim 32, and 33 which depends therefrom, is directed to an apparatus for the delivery of a therapeutic agent to cells which comprises, *inter alia*, a plurality of penetrating electrodes operatively connected to a second controlled source of energy sufficient to deploy the electrodes to a predetermined depth within the patient. Applicants assert that cited reference Hofmann '525 (US 5,273,525) is silent with regard to disclosing or suggesting at least the claimed element of a plurality of penetrating electrodes operatively connected to a second controlled source of energy sufficient to deploy the electrodes to a predetermined depth within the patient as presently claimed in claims 32-33. Further, Applicants assert that cited reference Enggaard does not cure the deficiencies of Hofmann '525.

Thus, Applicants assert that Hofmann '525 in view of Enggaard do not, either alone or in combination, disclose or suggest all of the elements of the claimed apparatus for the delivery of a therapeutic agent recited in claims 32-33.

Claims 38-40 are directed to an apparatus for the delivery of a therapeutic agent to cells which comprises, *inter alia*, a structural means incorporating a user interface and operative connections for said administration subassembly and said electrodes wherein said structural means is configured with a mechanism to facilitate transition of said injection needle and said electrodes from a retracted state within said structural means to a deployed state within the tissue of a patient. Applicants assert that cited reference Hofmann '525 (US 5,273,525) is silent with regard to disclosing or suggesting at least the claimed element of a structural means incorporating a user interface and operative connections for said administration subassembly and said electrodes wherein said structural means is configured with a mechanism to facilitate transition of said injection needle and said electrodes from a retracted state within said structural means to a deployed state within the

tissue of a patient as presently claimed in claims 38-40. Further, Applicants assert that cited reference Enggaard does not cure the deficiencies of Hofmann '525.

Thus, Applicants assert that Hofmann '525 in view of Enggaard do not, either alone or in combination, disclose or suggest all of the elements of the claimed apparatus for the delivery of a therapeutic agent recited in claims 38-40.

Cited References Hofmann '525 in view of Enggaard and Blackman

The references of Hofmann '525 and Enggaard as described above, and as previously stated, do not, either alone or in combination, disclose or suggest all of the elements of the claimed apparatus for the delivery of a therapeutic agent recited in claims 21-41. Applicants assert that Blackman does not cure the deficiencies of the Hofmann '525 and Enggaard references. Specifically, Blackman is cited merely for the use of a platinum needle and is silent with regard to at least the elements set forth above by the Applicants for which Hofmann '525 and Enggaard are likewise deficient.

For the reasons set forth supra, Applicants assert that Hofmann '525 and Enggaard, in view of Blackman do not, either alone or in combination, disclose or suggest all of the elements of the claimed apparatus for the delivery of a therapeutic agent recited in claims 21-41.

Cited Reference Hofmann '893

As provided above, claims 21-41 (as presently amended claims 21-40) are directed to various embodiments of an apparatus for the delivery of a therapeutic agent to cells in a predetermined cited within a tissue.

Claims 21 and 34-37 are directed to an apparatus for the delivery of a therapeutic agent to cells which comprises, *inter alia*, a plurality of penetrating electrodes arranged with a predetermined spatial relationship relative to the orifice of said apparatus. Applicants assert that cited reference Hofmann '893 (US 6,208,893) is silent with regard to disclosing or suggesting at least the claimed element of a plurality of penetrating electrodes arranged with a predetermined spatial relationship relative to the orifice of said apparatus as recited in claims 21 and 34-37.

Applicant respectfully provides that the spatial relationship as recited in claims 21 and 34-37 refers to the spatial relationship between the electrodes and the therapeutic agent to enhance the delivery of a therapeutic agent via the claimed apparatus. See, for example, [0037-0039], [0046] and

[0096]. To the contrary, Hofmann '893 is silent with regard to the spatial relationship between the electrodes and the therapeutic agent but, as noted by the Examiner in the Office Action of June 28, 2007, discloses "electrode spacing can be adjusted by the means (plate) with selectable holes for positioning. In addition, the embodiments also allow selection of pairs which will have different spacing from the orifice member."

Thus, Applicants assert that Hofmann '893 does not disclose or suggest all of the elements of the claimed apparatus for the delivery of a therapeutic agent recited in claims 21 and 34-37.

Claims 22 and 26-31 directed to an apparatus for the delivery of a therapeutic agent to cells which comprises, *inter alia*, a plurality of penetrating electrodes operatively connected to a controlled source of energy sufficient to deploy the electrodes to a predetermined depth within the patient. Applicants assert that cited reference Hofmann '893 (US 6,208,893) is silent with regard to disclosing or suggesting at least the claimed element of a plurality of penetrating electrodes operatively connected to a controlled source of energy sufficient to deploy the electrodes to a predetermined depth within the patient as presently claimed in claims 22 and 26-31.

Thus, Applicants assert that Hofmann '893 does not disclose or suggest all of the elements of the claimed apparatus for the delivery of a therapeutic agent recited in claims 22 and 36-31.

Claim 23, and claims 24 and 25 which depend therefrom, is directed to an apparatus for the delivery of a therapeutic agent to cells which comprises, *inter alia*, a protective shield which is configured to extend over said the electrodes following removal of the electrodes from a predetermined site within the tissue. Applicants assert that cited reference Hofmann '893 (US 6,208,893) is silent with regard to disclosing or suggesting at least the claimed element of a protective shield which is configured to extend over said the electrodes following removal of the electrodes from a predetermined site within the tissue as presently claimed in claims 23-25.

According to the Office Action: "Hofmann teaches several embodiments of an electroporation device including figures 24, 25 which teaches an infusion orifice at the tip of element 178 which is connected to the infusion line 180. Penetrating electrodes are shielded by cover member 162." Further according to the Office Action, "Applicant differs from Hofmann in reciting a controlled source of energy." Thus, as best understood by the Applicants, the position of the Office is that the Hofmann '893 teaches an extendable shield means for shielding either the agent

orifice or the electrodes from a user of the apparatus when the orifice or the electrodes are not in contact with the patient.

Applicants respectfully point out, at least for the reason that the Office has failed to recognize at least one difference between the device described by the Hofmann '893 reference and the device defined by instant claims 23-25, that there is no a rational underpinning to support a legal conclusion that Hofmann '893 would render claims 23-25 obviousness. In particular, what the Office characterizes as a "cover member 162" is not a protective shield which is configured to extend over said the electrodes following removal of the electrodes from a predetermined site within the tissue as required by instant claims 23-25. *See*, Hofmann '893, column 14, lines 10-14, and Figure 24. *Id.* Rather, 162 is a "flexible catheter member". According to Hofmann '893, "an elongated flexible catheter member 162 is fitted at a distal end with a template 164) having a plurality of through-sockets with sliding connectors 166, 168, 170 and 172." *Id.* From the drawings in Figure 24, it is apparent that the "flexible catheter member 162" is not extendable; rather it is the electrodes that extend into tissue. In contrast, instant claims 23-25 require that the protective shield be configured to extend in order to shield the agent orifice or the electrodes from the user of the apparatus when the orifice or the electrodes are not in contact with the patient. This feature is not disclosed or suggested by Hofmann '893.

Thus, Applicants assert that Hofmann '893 does not disclose or suggest all of the elements of the claimed apparatus for the delivery of a therapeutic agent recited in claims 23-25.

Claim 32, and claim 33 which depends therefrom, is directed to an apparatus for the delivery of a therapeutic agent to cells which comprises, *inter alia*, a plurality of penetrating electrodes operatively connected to a second controlled source of energy sufficient to deploy the electrodes to a predetermined depth within the patient. Applicants assert that cited reference Hofmann '893 (US 6,208,893) is silent with regard to disclosing or suggesting at least the claimed element of a plurality of penetrating electrodes operatively connected to a second controlled source of energy sufficient to deploy the electrodes to a predetermined depth within the patient as presently claimed in claims 32-33.

Thus, Applicants assert that Hofmann '893 does not disclose or suggest all of the elements of the claimed apparatus for the delivery of a therapeutic agent recited in claims 32-33.

Claims 38-40 are directed to an apparatus for the delivery of a therapeutic agent to cells which comprises, *inter alia*, a structural means incorporating a user interface and operative connections for said administration subassembly and said electrodes wherein said structural means is configured with a mechanism to facilitate transition of said injection needle and said electrodes from a retracted state within said structural means to a deployed state within the tissue of a patient. Applicants assert that cited reference Hofmann '893 (US 6,208,893) is silent with regard to disclosing or suggesting at least the claimed element of a structural means incorporating a user interface and operative connections for said administration subassembly and said electrodes wherein said structural means is configured with a mechanism to facilitate transition of said injection needle and said electrodes from a retracted state within said structural means to a deployed state within the tissue of a patient as presently claimed in claims 38-40.

Thus, Applicants assert that Hofmann '893 does not disclose or suggest all of the elements of the claimed apparatus for the delivery of a therapeutic agent recited in claims 38-40.

Corresponding Structure for Mean Plus Function Language in the Claims

In the Official Communication dated February 2, 2010, the Examiner alleges that the reply filed on 7-14-2009 is not fully responsive to the prior Office Action because it is allegedly unclear as to what structure in the specification corresponds to the means plus function language in the claims. In response, Applicants provide that support for the claims 21-40 (as presently amended) is found at least in the following places (with reference to the publication document WO03/086534 (PCT No.: PCT/US03/10337)):

Claim 21- page 6 lines 5-13, page 13 lines 17-22, and page 16 line 26 – page 17 line 21 (means for administration of the therapeutic agent, reservoir, orifice, controlled source of energy for transferring the therapeutic agent, plurality of penetrating electrodes, means for generating an electrical field).

Claim 22- page 6 lines 5-13, page 16 line 26 – page 17 line 21 (means for generating an electrical field), page 24 lines 11-18 (controlled source of energy for deploying electrodes), page 6 lines 22-30 (delivery of an agent within tissue), page 11 line 27 – page 12 line 3 (delivery to cells in tissue), page 24 line 31 – page 25 line 2 (connection of electrical field generating means to electrodes in their deployed state), and page 25 lines 7-11 (depth of the electrodes).

Claim 23- page 6 lines 5-13, page 16 line 26 – page 17 line 21 (plurality of penetrating electrodes, means for generating an electrical field), and page 6 lines 22-30 (delivery of an agent within tissue), page 11 line 27 – page 12 line 3 (delivery to cells in tissue), page 27 line 29 - page 28 line 1 (protective shield configured to extend over electrodes following removal of electrodes from site).

Claim 24- page 27 lines 2-9 (protective shield is operatively connected to a source of energy sufficient to extend said protective shield over said electrodes).

Claim 25- page 28 lines 7-9 (protective shield is precluded from accidental retraction once it is extended over said electrodes).

Claim 26- page 24 line 31 – page 25 line 2 (housing including a plurality of penetrating electrodes each configured with an electrically conductive region), page 6 lines 5-13, page 16 line 26 – page 17 line 21 (plurality of penetrating electrodes, means for generating an electrical field), page 24 lines 11-18 (means to deploy electrodes), page 28 lines 30-32, page 29 lines 1-9, and referencing FIG. 9 (electrodes having proximal and distal ends, each configured with an electrically conductive contact region at the proximal end, electrode contact points in said housing for mechanical interface with the conductive contact region, means for generating an electrical field operatively connected to the electrode contact points), page 25 lines 7-11 (depth of the electrodes).

Claim 27- page 25 lines 12-19 (contact points are comprised of an inert metal).

Claim 28- page 25 lines 12-19 (inert metal is gold plated).

Claim 29- page 28 lines 30-32, page 29 lines 1-9, and referencing FIG. 9 (contact points are conductive bands).

Claim 30- page 29 lines 1-9, and referencing FIG. 9 (each of said electrodes is configured to maximize the mechanical interface between said conductive contact region and said electrode contact point).

Claim 31- page 6 lines 5-13, page 13 lines 17-22, and page 16 line 26 – page 17 line 21 (means for administration of the therapeutic agent, reservoir, orifice, means to transfer therapeutic agent,

plurality of penetrating electrodes, means for generating an electrical field), page 6 lines 22-30 and page 11 line 27 – page 12 line 3 (delivery of an agent within tissue, delivery to cells in tissue), and page 25 lines 7-11 (depth of the electrodes).

Claim 32- page 6 lines 5-13, page 13 lines 17-22, and page 16 line 26 – page 17 line 21 (means for administration of the therapeutic agent, reservoir, orifice, plurality of penetrating electrodes, means for generating an electrical field, controlled source of energy for delivering the therapeutic agent), page 24 lines 11-18 (controlled source of energy for deploying electrodes), page 6 lines 22-30 (delivery of an agent within tissue), page 11 line 27 – page 12 line 3 (delivery to cells in tissue), page 24 line 31 – page 25 line 2 (connection of electrical field generating means to electrodes in their deployed state), and page 25 lines 7-11 (depth of the electrodes).

Claim 33- page 20 line 30 – page 21 line 1 (first controlled source of energy is at least one of compressed gas, spring, electromechanical means).

Claim 34- page 6 lines 5-13, page 13 lines 17-22, and page 16 line 26 – page 17 line 21 (means for administration of the therapeutic agent, reservoir, orifice, means for transferring the therapeutic agent, plurality of penetrating electrodes, means for generating an electrical field), and page 6 lines 22-30 (delivery of an agent within tissue), page 11 line 27 – page 12 line 3 (delivery to cells in tissue), and page 19 lines 17 et seq. (control means configured to provide a pre-determined temporal relationship between the administration of the agent and generation of the electrical field.)

Claim 35- page 28, line 25- page 29 line 9 (trigger sequence).

Claim 36- page 24 line 1 - page 25 line 2, page 26 line 24- page 29 line 9 (subassembly and details thereof, structural means), page 6 lines 5-13, page 16 line 26 – page 17 line 21 (means for generating an electrical field), page 6 lines 22-30 (delivery of an agent within tissue), page 11 line 27 – page 12 line 3 (delivery to cells in tissue).

Claim 37- page 24 line 1 - page 25 line 2, page 26 line 24- page 29 line 9 (subassembly and details thereof, structural means), page 6 lines 5-13, page 16 line 26 – page 17 line 21 (means for generating an electrical field), page 6 lines 22-30 (delivery of an agent within tissue), page 11 line 27 – page 12 line 3 (delivery to cells in tissue).

Claim 38- page 24 line 1 - page 25 line 2, page 26 line 24- page 29 line 9 (subassembly and details thereof, structural means), page 6 lines 5-13, page 13 lines 17-22, and page 16 line 26 – page 17 line 21 (reservoir, orifice, plurality of penetrating electrodes, means for generating an electrical field), page 6 lines 22-30 (delivery of an agent within tissue), page 11 line 27 – page 12 line 3 (delivery to cells in tissue).

Claim 39- page 24 line 1 - page 25 line 2, page 26 line 24- page 29 line 9 (subassembly and details thereof, structural means), page 6 lines 5-13, page 13 lines 17-22, and page 16 line 26 – page 17 line 21 (reservoir, orifice, plurality of penetrating electrodes, means for generating an electrical field), page 6 lines 22-30 (delivery of an agent within tissue), page 11 line 27 – page 12 line 3 (delivery to cells in tissue).

Claim 40- page 25 lines 4-5, page 6 lines 5-13(a plurality of penetrating electrodes wherein at least one of said electrodes is hollow having an orifice through which the therapeutic agent is administered from a fluid reservoir), page 24 line 1 - page 25 line 2, page 26 line 24- page 29 line 9 (subassembly and details thereof, structural means), page 6 lines 5-13, page 13 lines 17-22, and page 16 line 26 – page 17 line 21 (reservoir, orifice, plurality of penetrating electrodes, means for generating an electrical field), and page 6 lines 22-30 (delivery of an agent within tissue), page 11 line 27 – page 12 line 3 (delivery to cells in tissue).

Obviousness-Type Double Patenting

In the Office Action dated June 28, 2007, the Examiner has rejected claims 1-20 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of US 6,912,417. In the Reply of July 14, 2009, claims 1-17 were canceled and new claims 21-41 were added.

To the extent that the Examiner may provisionally reject claims 21-41 over claims 1-20 of US 6,912,417, Applicants requests that such rejection be held in abeyance and Applicants will then consider submitting a terminal disclaimer or additional arguments if appropriate.

CONCLUSION

In view of the remarks and amendments submitted herein, Applicants believe that the Application is in condition for allowance and such action is earnestly solicited.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (858) 350-2312.

Respectfully submitted,

WILSON SONSINI GOODRICH & ROSATI
Professional Corporation

Dated: April 2, 2010

Peter R. Munson, Agent for Applicants
Registration No. 43,821

650 Page Mill Road
Palo Alto, CA 94304-1050
Direct Dial: (858) 350-2337
Customer No. 21971